least one ground facility, two microphones, and two headsets or one headset and one speaker.

[Doc. No. 6258, 29 FR 19205, Dec. 31, 1964, as amended by Amdt. 121–19, 31 FR 6265, Apr. 23, 1966; Amdt. 121–130, 41 FR 47229, Oct. 28, 1976; Amdt. 121–251, 60 FR 65932, Dec. 20, 1995]

§121.351 Radio equipment for extended overwater operations and for certain other operations.

- (a) Except as provided in paragraph (c) of this section, no person may conduct an extended overwater operation unless the airplane is equipped with the radio communication equipment necessary to comply with §121.349, an independent system that complies with §121.347 (a)(1), and two long-range navigation systems when VOR or ADF radio navigation equipment is unusable along a portion of the route.
- (b) No certificate holder conducting a flag or supplemental operation or a domestic operation within the State of Alaska may conduct an operation without the equipment specified in paragraph (a) of this section, if the Administrator finds that equipment to be necessary for search and rescue operations because of the nature of the terrain to be flown over.
- (c) Notwithstanding the requirements of paragraph (a) of this section, installation and use of a single LRNS and a single LRCS may be authorized by the Administrator and approved in the certificate holder's operations specifications for operations and routes in certain geographic areas. The following are among the operational factors the Administrator may consider in granting an authorization:
- (1) The ability of the flightcrew to reliably fix the position of the airplane within the degree of accuracy required by ATC.
- (2) The length of the route being flown, and
- (3) The duration of the very high frequency communications gap.

[Doc. No. 6258, 29 FR 19205, Dec. 31, 1964, as amended by Amdt. 121–253, 61 FR 2611, Jan. 26, 1996; Amdt. 121–254, 61 FR 7191, Feb. 26, 1996]

§ 121.353 Emergency equipment for operations over uninhabited terrain areas: Flag, supplemental, and certain domestic operations.

Unless the airplane has the following equipment, no person may conduct a flag or supplemental operation or a domestic operation within the States of Alaska or Hawaii over an uninhabited area or any other area that (in its operations specifications) the Administrator specifies required equipment for search and rescue in case of an emergency:

- (a) Suitable pyrotechnic signaling devices
- (b) An approved survival type emergency locator transmitter. Batteries used in this transmitter must be replaced (or recharged, if the battery is rechargeable) when the transmitter has been in use for more than 1 cumulative hour, or when 50 percent of their useful life (or for rechargeable batteries, 50 percent of their useful life of charge) has expired, as established by the transmitter manufacturer under its approval. The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitter. The battery useful life (or useful life of charge) requirements of this paragraph do not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.
- (c) Enough survival kits, appropriately equipped for the route to be flown for the number of occupants of the airplane.

[Doc. No. 6258, 29 FR 19205, Dec. 31, 1964, as amended by Amdt. 121–79, 36 FR 18724, Sept. 21, 1971; Amdt. 121–106, 38 FR 22378 Aug. 20, 1973; Amdt. 121–158, 45 FR 38348, June 9, 1980; Amdt. 121–239, 59 FR 32057, June 21, 1994; Amdt. 121–251, 60 FR 65932, Dec. 20, 1995]

§ 121.354 Terrain awareness and warning system.

(a) Airplanes manufactured after March 29, 2002. No person may operate a turbine-powered airplane unless that airplane is equipped with an approved terain awareness and warning system that meets the requirements for Class A equipment in Technical Standard Order (TSO)-C151. The airplane must